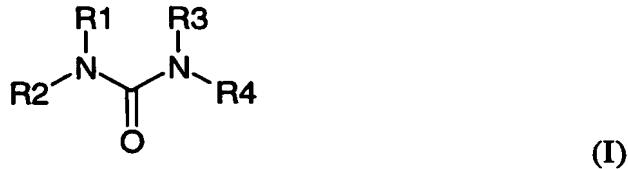


CLAIMS

1. A compound which is represented by formula (I) below



wherein

$\text{R}_1$  is  $\text{CH}_3$  or  $\text{CH}_2\text{CH}_3$ ;

$\text{R}_2$  is a *para* and/or *meta* substituted phenyl group;

$\text{R}_3$  is H,  $\text{CH}_3$  or  $\text{CH}_2\text{CH}_3$ ; and

$\text{R}_4$  is a linear or cyclic aliphatic group, which is optionally substituted, or, wherein

$\text{R}_1$  and  $\text{R}_2$  are as stated above while  $\text{R}_3$  and  $\text{R}_4$  are parts of a 4- to 6-membered cyclic entity, which is optionally substituted,

and which compound has affinity for human IgG of  $\kappa$ -type.

2. A compound according to claim 1, which is an affinity ligand with affinity for the constant region of a Fab fragment of human IgG of  $\kappa$ -type.
3. A compound according to claim 1 or 2, wherein  $\text{R}_1$  is  $\text{CH}_3$ .
4. A compound according to any one of the preceding claims, wherein  $\text{R}_2$  comprises a substituted phenyl group and the substituents are selected from the group that consists of F, Cl, Br, I and O.
5. A compound according to any one of the preceding claims, wherein the phenyl group of  $\text{R}_2$  is substituted in the *para* position with a group defined as  $-\text{O}-\text{R}_5$ , wherein  $\text{R}_5$  is either  $\text{CH}_3$  or  $\text{CH}_2\text{CH}_3$ .
6. A compound according to any one of the preceding claims, wherein the phenyl group of  $\text{R}_2$  is substituted with Cl or F in the *meta* position.

7. A compound according to any one of claims 1-4, wherein the phenyl group of R<sub>2</sub> is substituted with Cl in *meta* and *para* position.
8. A compound according to any one of the preceding claims, wherein R<sub>4</sub> is an aliphatic group, which is interrupted in one or more positions by oxygen atoms.
9. A compound according to any one of the preceding claims, wherein R<sub>4</sub> is an aliphatic group, which comprises one or more carbonyl group.
10. A compound according to any one of the preceding claims, wherein R<sub>4</sub> is an aliphatic group that comprises a terminating functionality selected from the group that consists of a carboxylic acid, nitrogen, oxygen, sulphur or any derivative thereof.
11. A compound according to any one of the preceding claims, wherein R<sub>1</sub> is CH<sub>3</sub>; R<sub>2</sub> is a phenyl group that has been substituted with Cl in *meta* and *para* position; and R<sub>3</sub> and R<sub>4</sub> are parts of a cyclic 5-membered group, which is optionally substituted.
12. A compound according to claim 11, wherein the cyclic 5-membered entity is substituted in a position directly adjacent to N with a C(O)-O-CH<sub>3</sub> group.
13. A compound according to any one of the preceding claims, which is capable of binding human to the constant region of IgG of κ-type, or a functional derivative thereof, with a binding constant of at least 10<sup>-3</sup> M.
14. A compound according to any one of the preceding claims, which is capable of binding to the constant region of a human IgG of κ-type, or a functional derivative thereof, via a binding pocket defined by the structure coordinates of the amino acids as shown in Fig 6.
15. Use of a compound according to any one of claims 1-14 for selective binding to the constant region of human IgG of κ-type, or a functional derivative thereof.
16. A sorption complex comprised of a compound according to any one of claims 1-14 directly linked to the constant region of a Fab fragment of a human IgG of κ-type, or a functional derivative thereof.

17. A separation matrix for affinity chromatography, which matrix comprises ligands coupled to a support, wherein the majority of the ligands are compounds as defined in any one of claims 1-14.
18. A separation matrix according to claim 17, wherein the ligands have been coupled to the support via linkers.
19. A separation matrix according to claim 17 or 18, wherein the support is a porous polymeric particle.
20. A generic method of isolating human IgG of  $\kappa$ -type from other components in a liquid, wherein a compound as defined in any one of claims 1-14 or a separation matrix according to any one of claims 17-19 is used.
21. A system suitable for affinity chromatography, which is comprised of a separation matrix as defined in any one of claims 17-19 packed in a column.